

The information below is an abbreviated outline of technical requirements - it is not intended as a substitute for the manuals, training, and reference information provided by the product vendor or by the Department. Please see the References for Technical Requirements below and consult the product vendor and the Department for additional information.																																														
Technical Specifications																																														
Version 2: 4/13/2016																																														
Windows PC* Desktop * MACs * Chromebook* iOS* Android Devices* Tablets																																														
Assessment	The ACT®	ACT WorkKeys®	ACCESS for ELLs®	Alternate ACCESS for ELLs®	EOCEP	SCPASS	SC READY	4K and 5K Readiness	SC-NCSC Alternate Assessment	SC-Alt Alternate Assessment																																				
Testing Population	Grade 11	Grade 11	Grades K-12	Grades 1-12	Grades - Middle, High, Alternative, Virtual, Home Course Specific	Grades 4-8	Grades 3-8	4K and 5K	Grades 3-8, 11	Grades 4-8, 11																																				
Online testing	In 2015-16 online testing is an option; paper test materials are also available.	In 2015-16 online testing is an option; paper test materials are also available.	In 2015-16 online testing is an option for grades 1-12 only.	In 2015-16 online testing is not an option.	In 2015-16 online testing is an option.	In 2015-16 online testing is an option.	In 2015-16 online testing is an option.	The 4K Teaching Strategies GOLD is an online assessment system.	In 2015-16 online testing is an option	In 2015-16 online testing is not an option.																																				
Hardware	Laptops, and desktops are supported - touchscreens not supported. Chromebooks are supported only when used with installable app software (see Installable App Software Requirements below, and when other requirements are met).	Laptops and desktops only, no tablets. No Chromebooks.	Desktop, Laptops, Netbooks/Tablets, Chromebooks, iPad 2/ iPad Air (keyboard strongly recommended), Android, Windows tablets	N/A	Desktop, Laptops, Netbooks/Tablets, Chromebooks, iPad 2/ iPad Air (keyboard strongly recommended), Android, Windows tablets	Desktop, Laptops, Netbooks/Tablets, Chromebooks, iPad 2/ iPad Air (keyboard strongly recommended), Android, Windows tablets	Desktop, Laptops, Netbooks/Tablets, Chromebooks, iPad 2/ iPad Air (keyboard strongly recommended), Android, Windows tablets	PC	Windows Desktop, Mac, Chromebook	N/A																																				
Memory	Windows: 512 MB RAM, Mac: 1 GB RAM, Chromebook: 2 GB RAM	None specified.	Per DRC: Min 512 MB RAM, Recommended: 1 GB RAM or greater (TSM software 4 GB RAM per 150 students (concurrently testing))	N/A	Per DRC: Min 512 MB RAM, Recommended: 1 GB RAM or greater (TSM software 4 GB RAM per 150 students (concurrently testing))	Per DRC: Min 512 MB RAM, Recommended: 1 GB RAM or greater (TSM software 4 GB RAM per 150 students (concurrently testing))	Per DRC: Min 512 MB RAM, Recommended: 1 GB RAM or greater (TSM software 4 GB RAM per 150 students (concurrently testing))	None specified.	None specified.	N/A																																				
Processor	Windows: x86/x32 and x64. Mac: only Intel-based. Chromebook (ChromeOS) Any.	None specified.	Win 1.0 GHz or >, MAC & Chrome 2GB or > Tablets - Androids 5.0 or >, iPad 2+	N/A	Win 1.0 GHz or >, MAC & Chrome 2GB or > Tablets - Androids 5.0 or >, iPad 2+	Win 1.0 GHz or >, MAC & Chrome 2GB or > Tablets - Androids 5.0 or >, iPad 2+	Win 1.0 GHz or >, MAC & Chrome 2GB or > Tablets - Androids 5.0 or >, iPad 2+	None specified.	Win 1.0 GHz or > MAC & Chrome 2GB or >	N/A																																				
Operating System	Testing can occur using a browser-based testing, or Installable App-based testing, unless using Chromebooks, which require the Installable app. See the Browser-based and Installable App-based requirements below.	Windows 7, 8 MAC OS 10.x (using the Firefox web browser only)	Win 7 or >, MAC OSX 10.7 or >, Chrome (stable channel), iPad 2/iPad Air (Apple iOS 9.3.1) or >, Android (Lollipop 5.0) or >, Win Tablet Win 8.0 >	N/A	Win 7 or >, MAC OSX 10.7 or >, Chrome (stable channel), iPad 2/iPad Air (Apple iOS 9.3.1) or >, Android (Lollipop 5.0) or >, Win Tablet Win 8.0 >	Win 7 or >, MAC OSX 10.7 or >, Chrome (stable channel), iPad 2/iPad Air (Apple iOS 9.3.1) or >, Android (Lollipop 5.0) or >, Win Tablet Win 8.0 >	Win 7 or >, MAC OSX 10.7 or >, Chrome (stable channel), iPad 2/iPad Air (Apple iOS 9.3.1) or >, Android (Lollipop 5.0) or >, Win Tablet Win 8.0 >	Windows XP SP2 or later Mac (OS X 10.6 or later)	Win Vista SP 2, 7 or 8, MAC OSX 10.7, Tiger 10.4.4, Leopard 10.5, Snow Leopard 10.6, Lion 10.7, Mountain Lion 10.8 or >	N/A																																				
Browser Support	<table><tr><th>Browser</th><th>Operating Systems</th><th>Other Requirements</th></tr><tr><td rowspan="4">Firefox 24 and higher</td><td>Windows: 7, 8, & 1</td><td>Java 8.8</td></tr><tr><td>Mac OS X: 10.7, 10.8, 10.9, 10.10</td><td>Enable pop-ups for TestNav</td></tr><tr><td></td><td>Create Java exception in Windows Firewall</td></tr><tr><td></td><td>Disable Skype plugins in Windows 7</td></tr><tr><td rowspan="4">IE 11</td><td>Windows: 7, 8.1, 10</td><td>Java 8.8</td></tr><tr><td></td><td>Enable pop-ups for TestNav</td></tr><tr><td></td><td>Create Java exception in Windows Firewall</td></tr><tr><td></td><td>Enable pop-ups for TestNav</td></tr><tr><td rowspan="2">Safari 6.x</td><td>Mac OS X: 10.7, 10.8</td><td>Java 8.8</td></tr><tr><td></td><td>Enable pop-ups for TestNav</td></tr><tr><td rowspan="2">Safari 7.x</td><td>Mac OS X: 10.9</td><td>Java 8.8</td></tr><tr><td></td><td>Enable pop-ups for TestNav</td></tr><tr><td rowspan="2">Safari 8.x</td><td>Mac OS X: 10.10</td><td>Java 8.8</td></tr><tr><td></td><td>Enable pop-ups for TestNav</td></tr></table>	Browser	Operating Systems	Other Requirements	Firefox 24 and higher	Windows: 7, 8, & 1	Java 8.8	Mac OS X: 10.7, 10.8, 10.9, 10.10	Enable pop-ups for TestNav		Create Java exception in Windows Firewall		Disable Skype plugins in Windows 7	IE 11	Windows: 7, 8.1, 10	Java 8.8		Enable pop-ups for TestNav		Create Java exception in Windows Firewall		Enable pop-ups for TestNav	Safari 6.x	Mac OS X: 10.7, 10.8	Java 8.8		Enable pop-ups for TestNav	Safari 7.x	Mac OS X: 10.9	Java 8.8		Enable pop-ups for TestNav	Safari 8.x	Mac OS X: 10.10	Java 8.8		Enable pop-ups for TestNav	Web Browsers Testing Workstations and Administrator URL (except Reports Portal – see below) Microsoft Internet Explorer 8, 9, 10, and 11 Firefox 24+ Chrome 41+ Administrative Reports Portal Microsoft Internet Explorer 8, 9, 10 (non-compatibility view), 11 (enterprise mode) Firefox 6+ Chrome 12+ Safari 4.x and 5.x Special Browser Considerations: The workstation browser must have JavaScript enabled and no AJAX (Asynchronous JavaScript and XML) blockers Internet Explorer 8, 9 & 10: Security settings (Tools > Internet Options > Security tab > Custom Level button)	I.E. 9, 10, 11 Safari 6.1.5 & 7.0 Firefox (35 or >) Chrome (stable channel) Note: the iPad application is available (keyboard strongly recommended)	N/A	INSIGHT secure web browser or Chrome (stable channel) Note: the iPad application is available (keyboard strongly recommended)	INSIGHT secure web browser or Chrome (stable channel) Note: the iPad application is available (keyboard strongly recommended)	INSIGHT secure web browser or Chrome (stable channel) Note: the iPad application is available (keyboard strongly recommended)	Safari 6.0 or newer Google Chrome 26.0 or newer I.E. 8 or newer Firefox 18.0 or newer	I.E. 9 Chrome 26 Firefox 24 Opera 12 Safari 6	N/A
Browser	Operating Systems	Other Requirements																																												
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		Enable pop-ups for TestNav																																												
Connectivity	See Network Speed below	See Network Speed below	Computers must be able to connect to the Internet via wired networks (wireless requires special provisions - check the specs on the website)	N/A	Computers must be able to connect to the Internet via wired networks (wireless requires special provisions - check the specs on the website)	Computers must be able to connect to the Internet via wired networks (wireless requires special provisions - check the specs on the website)	Computers must be able to connect to the Internet via wired networks (wireless requires special provisions - check the specs on the website)	Refer to: http://teachingstrategies.com/content/pageDocs/GOLD-System-Requirements-7-3-13.pdf	Computers must be able to connect to the Internet via wired networks (wireless requires special provisions - check the specs on the website)	N/A																																				
Network Speed	A network connection of 100 Mbps full-duplex or higher (the minimum is 10/100)	Broadband (256 Kbits/second or faster sustained download capacity to the workstation)	Per DRC: External Internet Connection With Caching 50 KB per second per student Per DRC: External Internet Connection Without Caching 100KB per second per student Mac 10.8 and 10.9 require Java runtime version 7 Update 51 (1.7.0_51) or later	N/A	Per DRC: External Internet Connection With Caching 50 KB per second per student Per DRC: External Internet Connection Without Caching 100KB per second per student	Per DRC: External Internet Connection With Caching 50 KB per second per student Per DRC: External Internet Connection Without Caching 100KB per second per student	Per DRC: External Internet Connection With Caching 50 KB per second per student Per DRC: External Internet Connection Without Caching 100KB per second per student	A minimum upload and download speed of 300 kbps (kilobits per second)	External Internet Connection 1.5 Mbps per student Internal School Network 1.5 Mbps per student	N/A																																				
SYSTEMS requirements (plug ins, pop-ups, read/write access, etc.)			No information	N/A	Not allowed - See recommendations per assessment websites	Not allowed - See recommendations per assessment websites	Not allowed - See recommendations per assessment websites	Java-based browser required.	Browser must support cookies and Javascript enabled.	N/A																																				
Yes. Consult ACT.	Yes. Consult ACT.			N/A	Testing computers should have access to the Internet and be able to access the DRC servers using HTTP/HTTPS protocols on ports 80 & 443. Whitelists required	Testing computers should have access to the Internet and be able to access the DRC servers using HTTP/HTTPS protocols on ports 80 & 443. Whitelists required	Testing computers should have access to the Internet and be able to access the DRC servers using HTTP/HTTPS protocols on ports 80 & 443. Whitelists required	Use of GOLD Online requires that the following TCP ports are open on any firewall, proxy server, or other packet filtering device that sits between the end user's computer and the Internet: 80 (http) 443 (https)	Not Specified	N/A																																				
Firewalls, Content, Spam Filters				N/A																																										
Screen Size	9.5" screen required	12" screen recommended	PC -10" screen size or larger	N/A	Per DRC Minimum 9.5", Recommended 13" or larger IOS 9.7" screen PC-10" screen (suggestion)	Per DRC Minimum 9.5", Recommended 13" or larger IOS 9.7" screen PC-10" screen (suggestion)	Per DRC Minimum 9.5", Recommended 13" or larger IOS 9.7" screen PC-10" screen (suggestion)	Not Specified	9.5" or larger	N/A																																				
Screen Resolution	1024 x 768	1024 x 768	1024 x 768	N/A	1024 x 768	1024 x 768	1024 x 768	Not Specified	1024 x 768	N/A																																				
Disk Space	None specified.	None specified.	1 GB (downloading later browsers increase disk requirements)	N/A	1 GB (downloading later browsers increase disk requirements)	1 GB (downloading later browsers increase disk requirements)	1 GB (downloading later browsers increase disk requirements)	Not Specified	1 GB (downloading later browsers increase disk requirements)	N/A																																				
Input Device Requirements (Desktops, Laptops, Android, iPad, Chromebook)	Wired keyboard and mouse	Keyboard	Wired Keyboard	N/A	Wired Keyboard	Wired Keyboard	Wired Keyboard	Not Specified	Wired Keyboard	N/A																																				
Interface Devices (Mice, Touchpads, Headphones, Earphone, Earbuds, Microphone) Requirements	Consult ACT.	Headphones (headphones with inline adjustable volume control preferred).	Headphones are required for specific tests such as text to speech accommodations for some assessments - Check the specs for assessments and grade levels.	N/A	Headphones are required for specific tests such as text to speech accommodations for some assessments - Check the specs for assessments and grade levels.	Headphones are required for specific tests such as text to speech accommodations for some assessments - Check the specs for assessments and grade levels.	Headphones are required for specific tests such as text to speech accommodations for some assessments - Check the specs for assessments and grade levels.	Not Specified	Headphones are required for specific tests such as text to speech accommodations for some assessments - Check the specs for assessments and grade levels.	N/A																																				
Other	Yes. Consult ACT vendor for additional requirements, including requirements for proctor caching, requirements for the installable app, Java, system checks, and other requirements.	Yes. Consult ACT for additional requirements, including technical requirements for generating score reports.		N/A				Browser must be set to accept cookies in order to use system. Adobe Flash Player 11.2 or greater (free from adobe.com) is required for certain functions, such as uploading files to the system and participating in e-learning. Refer: http://teachingstrategies.com/content/pageDocs/GOLD-System-Requirements-7-3-13.pdf		N/A																																				
Assistive Technologies	Consult ACT and SCDE for additional information.	Consult ACT and SCDE for additional information.		N/A					The consortium is working to validate compatibility with common assistive devices. NCSC will issue more detailed information as it's finalized	N/A																																				
Consortium	N/A	N/A	DRC INSIGHT	DRC INSIGHT	DRC INSIGHT	DRC INSIGHT	DRC INSIGHT	N/A	National Center and State Collaborative	NA																																				
Proctor Caching	SC will test using proctor caching. Consult ACT for additional technical requirements for proctor caching.			A proctor administered assessment.				Note: Midges, PALS, and DRA2 are paper test and proctor enters student response into online system for these particular programs. Gold is an online instructional system.	Proctor works with the student and may be a teacher who enters responses chosen by student.	A proctor administered assessment.																																				
Security Notes:	ACT allows students to test on devices that go home with students so long as the school maintains administrator rights on the device. Per ACT, the ACT online testing platform is locked down.	Per ACT, the ACT WorkKeys testing platform is not locked-down. Testing must be continuously monitored by testing staff onsite. For 2015-16, ACT is allowing for the delivery of ACT WorkKeys Online tests on any computer that meets ACT technical specifications. This includes the use of student-owned or school-owned laptop computers, provided proctors observe delivery protocols and procedures to ensure fairness and maintain the security of ACT's test forms.	Eligible devices and operating systems must have the administrative tools and capabilities to "lock down" the device to temporarily disable features such as email, messaging, screen capture, unrestricted Internet access, etc.	N/A	Eligible devices and operating systems must have the administrative tools and capabilities to "lock down" the device to temporarily disable features such as email, messaging, screen capture, unrestricted Internet access, etc.	Eligible devices and operating systems must have the administrative tools and capabilities to "lock down" the device to temporarily disable features such as email, messaging, screen capture, unrestricted Internet access, etc.	Eligible devices and operating systems must have the administrative tools and capabilities to "lock down" the device to temporarily disable features such as email, messaging, screen capture, unrestricted Internet access, etc.	Not Specified	Not Specified	Not Specified																																				
Assessment Website References for Technical Requirements	1. SCDE: https://ed.sc.gov/tests/high/the-act/ 2. For the vendor's technical requirements, see http://www.act.org/content/act/en/products-and-services/state-and-district-solutions/act-online-testing.html and consult ACT. District and school staff are provided with access to additional information on ACT's technical requirements, but that information is not made public.	1. SCDE: https://ed.sc.gov/tests/high/act-workkeys/ 2. For the vendor's technical requirements, see http://www.act.org/content/act/en/products-and-services/workforce-solutions/act-workkeys/administer.html and consult ACT. District and school staff are provided additional information on ACT's technical requirements, but that information is not made public.	1. WIDA: https://www.wida.us/assessment/access20-tech.aspx 2. DRC insight: http://www.ed.sc.gov/tests/tests-files/sc-ready-files/drc-insight-technology-user-guide-2016/ 3. SETDA: http://gtr.setda.org/chart/#/79	N/A	1. DRC INSIGHT: http://www.ed.sc.gov/tests/tests-files/sc-ready-files/drc-insight-technology-user-guide-2016/ 2. SETDA: http://gtr.setda.org/chart/#/79	1. DRC INSIGHT: http://www.ed.sc.gov/tests/tests-files/sc-ready-files/drc-insight-technology-user-guide-2016/ 2. SETDA: http://gtr.setda.org/chart/#/79	1. DRC INSIGHT: http://www.ed.sc.gov/tests/tests-files/sc-ready-files/drc-insight-technology-user-guide-2016/ 2. SETDA: http://gtr.setda.org/chart/#/79	1.5K – DRA2 is published by Pearson: http://www.pearsonschool.com/index.cfm?locator=PS2424&PMDbProgramID=23663 2.4K – Gold is published by Teaching Strategies: http://shop.teachingstrategies.com/page/GOLD-assessment-online.cfm 3.4K- PALS is published by CaseNEX: https://pals.virginia.edu/rd-background.html 4.4K- midges is published by Early Learning Labs, : http://www.myigdis.com/	1. SCDE: https://ed.sc.gov/scde/assets/File/tests/middle/ncsc/SC-NCSC_Assessment_System_User_Guide_for_Test_Coordinators_2016.pdf 2. SETDA: http://gtr.setda.org/chart/#/	N/A																																				

Additional Information Resources:
USDE: <http://tech.ed.gov/files/2015/12/NETP16.pdf>
SETDA: <https://www.edsurge.com/n/2014-05-12-setda-releases-guide-to-tech-requirements-for-online-testing>
DLM Alternative Assessment System: <http://dynamiclearningmaps.org/>